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Backwards time: Causal catachresis and its influence on viewpoint flow

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Abstract: This paper proposes a cognitive linguistic explanation of the unusual narrative construal of time as moving backwards. It shows that backwards time in narrative involves setting up an alternative space in which a second narrative is constructed simultaneously, resulting in a viewpoint hierarchy which postulates four viewpoints on each discourse statement. The paper draws together research on conceptual metaphor, mental spaces theory and viewpoint multiplicity, bringing it to bear on discourse fragments. The majority of these are taken from Martin Amis's *Time's Arrow* (Amis, Martin. 2003 [1991]. *Time's Arrow*. London: Vintage.) (a logically consistent and linguistically revealing text), but the discussion is contextualised with further examples. It is argued that the causal construal implied by narrative is not limited by our phenomenological experience, as other studies (e.g., Evans, Vyvyan. 2013. *Language and time: A cognitive linguistics approach*. Cambridge: Cambridge University Press.) might suggest, but is instead prompted by conceptual re-interpretation of deictic markers in the discourse. The analysis focuses on causal construal, negation (especially causal catachresis), and alternativity. It shows how linguistic features at the sentential level generate top-down reorganization of both episodic structure and discourse meaning, and how this relies on multiplicity of viewpoint and a conceptual "zooming out" prompting the perception of irony.

Keywords: catachresis, viewpoint, narrative deixis, time construal, irony

1 Backwards time

We have become used to narratives presenting information in a recognizable temporal sequence, correlated with the common-sense understanding of time's flow as directed from the past towards the future. Even narratives which subvert the order of time using flashbacks or flash-forwards do so within the confines of this sequence – flashbacks do not make us think 'backwards'. However, some

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narratives do reverse the flow of time, distorting the normal relationship between event sequence and flow as seen by a narrator-observer (who normally experiences time as flowing from the past toward the future).[1] These texts say something about time which eludes expression in spoken discourse by expanding the viewpoint configuration of a series of events. As a result, it is important to understand how the linguistic construal of time works in such texts. This paper proposes a theoretical framework for analyzing backwards time as an alternative viewpoint, defining narrative time as a generic subjective construal from the ego viewpoint of a putative narrator-observer. A cognitive linguistic approach is taken in order to explain how temporal construals can be reversed in narrative without reversing syntax. This method makes a contribution towards solving the longstanding literary problem of providing a coherent account of the rhetoric of backwards time, and of accounting for its black humor. The principal source text, Martin Amis's *Time's Arrow* (2003 [1991]), provides many examples.

Might it not be that backwards time in narrative is a freak which does not tell us anything special about what our minds are doing when we use language? Granted, backwards time is a highly stylized and atypical narrative effect. However, while *Time's Arrow* may be the only example of a narrative in which this effect has been sustained across a whole novel there are numerous literary precursors. To cite a few: *Through the Looking-Glass* (Carroll 2007 [1871]), *Sylvie and Bruno* (Carroll 1988 [1889]), *Counter-Clock World* (Dick 2008 [1968]) and *Slaughterhouse-Five* (Vonnegut 1991 [1969]).[2] Examples from some of these texts will be looked at in Section 5. That the technique of backwards time has been practiced for at least a century is testament not only to its interestingness but also to its intuitive readability: these are not dusty forgotten authors.

2 Temporal construals and viewpoint configuration

The sequentiality imposed by the reader of a text in English is typically conceptualized laterally, left-to-right, e.g., "1066, 1789, 1945" (Amis 2003

1 Dancygier (2019) notes that the narrator-observer need not be construed anthropomorphically. It may, however, be useful to think of it this way since a number of cognitive abilities, or at least their simulation, are presupposed by the concept of viewpoint (viz. perception, memory, etc.).

2 But cf. Philip K. Dick's *Counter-Clock World* (Dick 2008 [1968]), Section 5.

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[1991]: 16).[3] However, in spoken English discourse time is usually sagittal: from front to back, employing the basic schema of figure and ground to express an ego's relation to an event (Gaby and Sweetser 2017). Changes in sequence, and in relationships between figure and ground, contribute to the on-line temporal construal. In this way, basic egocentric temporal idioms function cumulatively in narrative to create a sense of movement towards the end. It is this logic which means that we can no longer say of a subject that *she has her whole life ahead of her* on her one hundredth birthday. Analogously, temporal metaphors such as *I have the whole novel ahead of me* (barring the facetious physical statement) are true when I have just started reading it, but false when there are only five words left. Returning to our centenarian, what is interesting about narrative is that, despite this similarity, in narrative it would be perfectly intelligible to say that *her story is just beginning*. This is because narrative time is not really time, but a grammatical expression of the proportion of information yet to be divulged before the story ends.

Complicating the lateral sequentiality of printed narrative, the book as a physical object invites an active sagittal mapping of time in which the future is ahead of us in contrast to, say, a movie where although the future is ahead a passive sagittal mapping has intuitive appeal. In narrative texts the future is both ahead and to the right of the present moment as constructed by the reading gaze, so that the reader's viewpoint flow is blended with the forward progress of the narrative itself, typically corresponding to thermodynamic time or "time's arrow" (Eddington 1929 [1928]: 69). There are thus two orders of time at play in reading a text, which broadly correspond to Langacker's (1990, 1999) "conceived" vs. "processing" time. The 'direction' of each is construed as relative to the putative moment of utterance.[4] In backwards time, what emerges over processing time is first conceived time as it is presented (backwards), then an alternative conceived time (forwards).

Although the literature on conceptual metaphors of time is already extensive (see, e.g., Casasanto 2017; Evans 2004; Fauconnier and Turner 2010 [2007]; Lakoff and Johnson 1980, Lakoff and Johnson 1999; Moore 2014; Weger and Pratt 2008) it does not throw much light on the linguistic features used to produce texts in which time is understood to go backwards. The idea of time as motion appears such texts in an unorthodox yet intelligible linguistic

3 Other languages demonstrate different orientations of temporal conceptualization, often correlated with writing direction (Bergen and Chan Lau 2012; Boroditsky 2000, Boroditsky 2001; Goody and Watt 1963; I-Wen Su 2016; Izutsu and Izutsu 2016; Majid et al. 2013).

4 Cf. Genette's (1972) tripartite distinction between *histoire, récit* and *narration* (for temporal purposes, roughly, 'story time', 'narrative time' and 'time of utterance').

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form, modifying the default temporal construal and forcing an alternative mental space. As a result, understanding the discourse they employ means subjecting both temporal metaphors and the nature of narrative to further scrutiny.

There are two principal mappings of temporal experience in English which may be crudely characterized as active and passive. Both are dynamic, taking time as relative motion through space. The active mapping, usually referred to as Moving Ego, features an observer who moves through a static temporal landscape where "experiencing a time is being located at a location" (Gaby and Sweetser 2017: 627). In the passive mapping, called Moving Time, the observer stands still while time goes by. In neither case do both Ego and Time move. The spatial metaphors used to conceptualize time in English are exclusively based on some formulation of Figure-Ground relations. The configuration of Ego and Time as figure and ground is interchangable, depending on linguistic use: either Ego or Time is construed as moving, while the other is construed as static. In the active mapping, Ego is the figure and Time the ground. In the passive mapping, it is the other way around. Which element is moving and which remains static can be determined by linguistic cues such as deixis, ordinals and the construal of causality (See Section 4). That these cues are viewpointed is evidence in favor of Nuñez and Sweetser's (2006) argument that discourse construes events relative to Ego.

In English speakers, these cognitive mappings tend to place the past behind the Ego and the future in front of it and, as a result,

> we can infer that Future times will become the Ego's Now and that Past times have been Now, and will not be Now again. (The mappings simply do not take into account the possibility of walking the opposite direction along a path, which makes sense since – barring science fiction scenarios – our experience of Time is entirely unidirectional.) (Gaby and Sweetser 2017: 630)

At first glance, the argument made here by Gaby and Sweetser (2017) seems to undermine the claim of this paper. On closer inspection, however, it becomes apparent that unlike normal discourse, narrative destabilizes the relationship of the Moving Ego to 'now', revealing that in narrative 'in front' and 'behind' are relative – they are tied to story information rather than time proper – and that causal catachresis opens an alternative space which may always be available.[5] This is not a refutation of Gaby and Sweetser's (2017) findings, but an

5 Catachresis is semantic misuse. It plays an important role in generating alternative meanings, especially in discourse where misdirection is required, such as humor. See (Chrzanowska-Kluczewska 2011). The linguistic features to which the term causal catachresis pertains are

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acknowledgment that the unidirectionality of experience which dictates the conceptual source domain of our mappings of time does not hold in narrative. As a result, the teleological drive of narrative uptake need not correspond with the order or causality presented by the discourse and/or plot. That the default mapping places the future in front of the ego is evidence that inverting the sequence of narrative episodes will incur a sort of backwards time. When this happens, the addressee is forced to construct an alternative space in which events match with personal experience. In other words, it is precisely the fact that we do not experience backwards time in reality that makes it possible in narrative.

Although both the active and passive cognitive mappings are compatible with forwards time, most narrative implicitly relies on the active formulation coupled with the metaphor SEQUENCE IS RELATIVE POSITION ON A PATH (Moore 2006). This is because narrative assumes *a priori* that what is being divulged has already happened (somewhere, somewhen) at the putative moment of utterance (Wittenberg 2013) in order to explain how the narrator has access to story information. We might usefully think of this metaphor as STORY IS A PATH. Where the narrator (ego) goes within that pre-elapsed time, and at what rate, is a subjective matter: narrative time is always filtered through a narrator-observer's personal past. The logic runs something like this:

1) TIME IS MOTION ALONG A PATH
2) STORY IS A PATH
3) SEQUENCE IS RELATIVE POSITION ON A PATH
∴ REVERSED SEQUENCE IS BACKWARDS TIME

This account of narrative time explains the salience of the distinction between what partisans of Langacker's view call "veridical time" against "metaphorical path" (Huumo 2017; Moore 2006). In terms of the SOURCE-PATH-GOAL schema, we might say that *Time's Arrow* presents us conceptually with two travelers on the same path (story) – two moving observers on the timeline – each heading in a different direction (time). More precisely, the two observers (narrator and character) have different temporal viewpoints but inhabit the same deictic ground in all episodes. In *Time's Arrow* this 'movement' is constructed on line during reading and is congruent with processing time.

Backwards time, then, incurs a heavy processing cost. To maintain its complex viewpoint configuration, the logic of backwards time must be sustained coherently

predominantly deictically relative; see Section 2. For a breakdown of causal catachresis see Section 6.

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throughout the plot of a narrative, and for backwards time to be logically coherent in a plot tied to world history it cannot include free will. If it did, progress into the past would not really be so because that past would be being overwritten by actions taken in the present and narrative testimony would be rejected out of hand rather than subjected to further processing. To sidestep this issue, which might lead readers to dismiss the narrative as nonsense, the narrator of *Time's Arrow* appeals to a Moving Time mapping (e.g., "Time is heading on now towards something. It pours past unpreventably [...]" (Amis 2003 [1991]: 67). This is narrative artifice. It is necessary to account for the narrator's experience of backwards time that it should appear that we are dealing with a passive mapping, but in fact the reason we are able to recognize the narrator's experience as backwards is that we process it forwards. It is a consequence of the correspondence between Moving Ego and the phenomenology of textual uptake. The narrative text itself, as Genette argues, "has no temporality than what it borrows, metonymically, from its own reading" (1983 [1972]: 34). What this means is that the Moving Ego construal invited by the text as physical object is integrated with the putative Moving Time of the narrative so that it appears time is moving backwards when really the discourse is an inversion of the sequence of events to which the teleological drive of the narrative is being applied.

The upshot is that SOURCE and GOAL are revealed to be viewpointed with respect to time: each of the two observers in the narrative has a different point of origin (past) and a different destination (future), though both travel the same path (lifespan). This also means that, *pace* Huumo (2017), the orientation of travel on the timeline *is* open to change through two main processes: (1) inversion of the sequential presentation of events described, along with earlier-/later than relationships and (2) catachresis of deictically relative linguistic features such as aspect, tense, and spatiotemporal position. Ultimately, it is these processes combined which force the reader into constructing an alternative space in which narrative time goes forwards: the default construal is too familiar to make us construct an alternative space. Sentential linguistic inversions allow us to see what we otherwise would not: narrative deixis is Janus-faced.

3 Analysis of *Time's Arrow*

Time's Arrow is a first person internally focalized narrative. Told in a mixture of past and present tense, it localizes thoughts and feelings within the moment of events as they pass, so that the character-cum-narrator appears to tell the tale directly from the deictic center to which the narrative refers. However, despite sharing a body with the main character – Odilo Unverdorben, ex-Nazi Doctor – the narrator of *Time's Arrow* is not strictly a character. This means that the

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narrative is also, in the alternative space, the externally focalized narrative of Odilo. It is to this hypothetical viewpoint that we attach the experience of forwards time, leaving us with a narrative in which backwards time is internally focalized while forwards time is externally focalized in an alternative space. We know Odilo as Tod Friendly when the narrative begins with his un-death because he is living under a pseudonym in America. As the novel progresses further back in time, false names are stripped away until the original identity is uncovered while the narrator, who experiences Odilo's life backwards, remains anonymous. This set-up draws attention to two things. First, it points to narrative's reliance on one or more putative narrator-observers whose viewpoint determines how things are described. Second, reversing time highlights an epistemic flexibility within viewpoint by inverting the relation between memory and tense.[6] In other words, it shows that deixis is Janus-faced: doubly populating a single deictic center with a character and narrator-observer who do not see eye to eye on time leaves us with two competing interpretations of events. It is often acknowledged that narrative typically relies on multiple viewpoints. Indeed, some form of dualism is essential in narrative since the narrator cannot be embodied within the narrative without suffering what Currie calls the "narratological shipwreck". That is, the narrator and the narrated must each have a separate consciousness – cannot inhabit the same moment in time – or else "there would be nothing left to narrate except narration itself". (1998: 123). By complicating this configuration further, backwards time reveals something of the integral roles of tense and memory in narrative sense-making. By default, we assume that processing time, and our own experience of causality align with those narrative. Setting tense against memory in narratives where time goes backwards produces a dualism so unfamiliar, it implies its mirror image.

It has been argued, for example by Sanders et al. (2009), that in any discourse concerned with causality we ought to distinguish between events and causes which come from the outside world and events/causes which come from an intentional mind or "subject of consciousness [SoC]" (2009: 21). A speaker/SoC typically utilizes a joint or shared access knowledge base which provides the epistemic foundations upon which to construct causality. For this reason, the authors explain,

> Epistemic and speech act spaces share presence of the Speaker as a SoC, but in the epistemic space the Speaker-SoC is only a participant in reasoning processes; by contrast, in the speech-act space she is an interactive agent in a communicative exchange, which

6 For more on epistemic distance in relation to deixis, see the discussion of demonstratives in Dancygier (2019).

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> takes place in the shared setting with the addressee and links both to a Deictic Communicative Center. (Sanders et al. 2009: 52)

Fictional narratives complicate the account given above by constructing a causality in which all events and causes come from an intentional mind, not necessarily embodied. Moreover, while in conventional first-person narratives there may be a single deictic center on which two viewpoints are postulated (that of the narrator 'now', at the moment of utterance, and the viewpoint of the character 'then', while the events were taking place), *Time's Arrow* populates its deictic center with a split self: one experiences time backwards, one forwards. The alternative space generated by causal catachresis and episodic reversal contains the viewpoint flow heading toward the present moment rather than away from it. It also contains the viewpoint and notional SoC from whose memory the text must logically come, i.e., Tod, the final pseudonym of Odilo in forwards time. This means that there are in effect four viewpoints postulated on *Time's Arrow's* deictic center. In the main narrative space, we have (1) the narrator-observer 'now'; (2) the viewpoint of the putative character 'then', while in the alternative space we have (3) the silent corollary narrator-observer for whom causality runs forwards 'now'; (4) the viewpoint of the character Tod/Odilo facing forwards in time 'then'.

The reason for this duplication of viewpoint configuration is that for time to go backwards it must be doubled. One order of time is set against another so that temporal progress is inversely proportional. Commentators who have so far attempted to provide accounts for this rhetorical effect in *Time's Arrow* have typically registered two linguistic techniques: episodic reversal and semantic "antonymization" (Chatman 2009) or a division based on Langacker's (1990, 1999) "conceived" against "processing" time (Głaz 2006). Although these accounts identify what is going on linguistically in terms of reversing time they do not adequately describe how this is done in contrast to the standard temporal construal. The narrative makes consistent use of an ordinary mental metaphor's flexibility in order to add alternative construals to the default, which remains cognitively accessible. By the same token, neither of these accounts offers a convincing argument for *why* a narrator might present time in this manner.

Narrating backwards develops and sustains two viewpoints on an event sequence: how the story is told against how it 'really happened'. To a certain extent this is true of all narrative. However, in backwards time the distinction is the consequence of epistemic limitation and causal catachresis, leading to a dual viewpoint configuration. That is, for every moment in the story, there are two possible viewpoints from which to construe events and thus two possible narrators from whose vantage point at either 'end' of the tale events may be

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emplotted, leading to the four-way viewpoint configuration outlined above.[7] This makes backwards time an ideal technique for pointing up the irony of particular opinions, beliefs and situations. It changes the stance from which we interpret the linguistic features which substantiate them and invites us to consider them from two viewpoints at once.

4 Catachresis: Mental spaces and irony in the discourse of *Time's Arrow*

Irony, in its most basic form, is a clash of perspectives. In order to perceive irony in a text or discourse, we must be able to interpret it in at least two conflicting senses. One of the ways narrative canonically does this is by presenting events from an epistemically limited viewpoint – that is, a situation in which the implied author and the implied reader have access to an alternative interpretation of a character or narrator's construal of events. Tobin and Israel (2012: 44) claim that "Irony in all its forms is a figure of subjectivity". Moreover, they argue,

> [t]he possibility for irony is, in effect, a natural consequence of the narrative mind: irony arises from the fact that any situation we encounter is subject to interpretation both as something that happens and as something that is represented. However, irony's operation is constrained by the high costs it puts on processing and a consequent need for highly ritualized discourse contexts.

On this view, narrative as a form of discourse stresses the tension between subject and object, as well as between signifier and signified. If one consequence of narrative's being filtered through the viewpoint of a putative narrator-observer is that its temporality is open to change, another is that its authority is to be doubted. This is another factor contributing to the construction of the alternative narrative in backwards narratives utilizing causal catachresis. When narrative time starts going backwards, it becomes obvious that there is another viewpoint available, and one with which we are more comfortable. It is for this reason that backwards time lends itself to irony.

In backwards time, the reader participates in construction of temporality from the top down by transforming the narrative deixis of the multiple spatio-temporal settings of what is told through his/her own singular, linear reading of

7 'Emplotment is the way by which a sequence of events fashioned into a story is gradually revealed to be a story of a particular kind.' (White 1980 [1973]: 7).

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the text and mental re-organization of episodes into a coherent, sequential, received narrative (cf. Chafe 1994; Dancygier 2012b; Herman 2013). Interestingly, there is little change between backwards and forwards time syntactically. Instead, backwards time emerges semantically in *Time's Arrow* through catachresis of temporally relative deictic terms so that what seems to the narrator to "come" is retrospectively construed by the reader to really "go" (Amis 2003 [1991]: 16). What this means is that there are two ways of presenting time dynamically through narrative statements: either one says what occurred or one catachrestically inverts linguistic features pertaining to time, as in (1).

(1) He got a real kick out of it too, always looking for new ways to uglify the home. On would come the dungarees at the weekend. He prowled around in a simian hunger, searching for things to splatter and deface. (Amis 2003 [1991]: 68)

The inversion of causality in this type of catachresis is a nuanced form of negation. The use of negation to generate alternative spaces is now generally accepted (Fauconnier 1985; Dancygier 2012a). In standard negation, the production of alternative spaces is obvious: the only difference between the statement *I didn't run* and silence is the alternative space in which *I ran*. The implicit referent of negation is semantically available, though not linguistically present. Alternative spaces thus maintain blended concepts of identity which are nevertheless causally distinct. Typically, an alternative space is born when a use of language prompts the construction of meaning not present in the discourse but to which the discourse implicitly refers. In discourse constructions deploying backwards time it is not so much that the use of particular linguistic features prompts the construction of an alternative space as it is that the narrative's obviously distorted causality forces the construction. That is, deictic features that would not normally be prominent in the discourse become so because they are incongruent with the phenomenologically derived understanding of time which generates flow in the default viewpoint configuration.

In (1) the effect – satisfaction – is the same in both directions of time, but the cause is misconstrued because the process is seen from the viewpoint of backwards time: making our homes ugly does not typically give us satisfaction. Catachresis forces an alternative space in which the reader recognizes this as home renovation in reverse. Notice that most features of the narrative do not change: the dungarees come on in both directions of time because the action is generalized to the weekend. If the narrator were more specific, the dungarees might 'come on' on Sunday evening and 'come off' on Sunday morning. Generalization sustains the alternative viewpoint, ensuring that neither the

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forward nor the backward construal can be fully discarded in meaning production. This encourages the reader to adopt a higher-level viewpoint.

Consider the following examples:

(2) The crisis centre is not called a crisis centre for nothing. If you want a crisis, just check in [...] Some [women] require more specialist treatment. They stagger off and go and lie in a park or a basement or wherever, until men come along and rape them, and then they're okay again. (Amis 2003 [1991]: 39)

(3) As well as prussic acid and sodium evipan I now extract benzene, gasoline, kerosene and air. Yes, air! Human beings want to be alive. They are dying to be alive. Twenty cubic centimeters of air – twenty cubic centimeters of nothing – is all you need to make the difference. (Amis 2003 [1991]: 145)

(4) our ticket, dispensed with a contemptuous flick by the station trashcan, bears the name of our starting-point, not our destination. (Amis 2003 [1991]: 71)

The discourse is strange but perfectly intelligible in its own right. However, causality is negated through catachresis, producing shocking incongruities with everyday experience. This dissonance forces the construction of an alternative space in which the reader reconfigures events so that they match schemas corresponding to the default temporal construal. Example (2) exhibits simple causal reverse: women come into the center and leave in crisis. Negation here is nuanced, though: *not* and *nothing* are not functioning as straightforward inverters of the received meaning of crisis centre. Instead, they draw attention to a new and disturbingly apposite interpretation of the name *crisis centre*. Normally, *crisis centre* means something along the lines of 'a place where people can receive treatment during crisis'. A particularly literal mind might criticize this name on the ground that the centre actually functions in an anti-crisis spirit. On this view it is perhaps wrongly named. In backwards time, however, causal catachresis indicates that the narrator construes the crisis centre as a place one goes in order to obtain a crisis, so that even the most literal of minds could not argue with the name. The catachrestic use of *rape* as "specialist treatment" to set women right again prompts us to re-construe the scene from a viewpoint in which rape precedes (causes) crisis. In (3) the catachresis centers on *dying* and *extract*. *Extract* is a recognizable inversion of "inject". Extracting lethal compounds from corpses brings them to life so that the Nazi doctor gives, rather

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than takes, life. *Dying to be alive* plays to the colloquial sense of *dying to* as a state of anticipation in the main narrative space, while in the alternative space dying is recognized as the process through which, from the narrator's viewpoint, patients become alive. Extract (4) demonstrates the consequences of this catachresis for plot: starting point and destination (beginning and end) are reversed. Expressed genitively: one man's trash is another man's ticket.

It might be argued that what is observed here is not really a matter of dual viewpoint but a matter of drawing inferences based on general world knowledge and schemata. This objection can be countered by observing that the latter are constituent parts of viewpoint. A viewpoint is a generalized subjective construal, usually built on schemata and general world knowledge and funneled through the putative deictic center of localized embodiment. There is no discourse statement about causality or about value which is not viewpointed. Where explicit indicators are present, there are often alternative framings, e.g., *to come* versus *to go*. This paper, then, agrees with previous research finding that "whenever such alternatives are available, the choice is dictated by and has consequences for the sentence's implied deictic center" (Sanders and Redeker 1996: 290). Alternative framings, while often signaled by deictic markers, need not be. They can be the result of sustained use of an alternative causal construal in place of the expected (default) construal. Such usage invites a top-down reconstruction of temporality in order to reconstrue the scene within the default frame.

The examples considered above support the claim that backwards time can be linguistically realized through targeted negation of deictically relative terms on the basis of a dual-observer construal. This in turn suggests that narrative temporality has a dual aspect: backwards time entails a shift to a negative semantic frame in which processes from the narrator-observer's ego viewpoint are understood as *un*-processes, as opposed to nonsense. Once the notion of an observer's viewpoint flow heading forward into the past is assimilated within the schematics of backwards time, (2), (3) and (4) lose their flavor of nonsense. Causality takes on an equivocatory aspect when subjected to the Janus-like gaze of backwards narrative. In the context of a Nazi doctor's biography, the development of a paradigm in which healing is harming and killing is curing results in an intense and uncomfortable irony.

5 Why backwards time? Other uses

In literary narrative, irony often follows when backwards time is used. All of the literary works mentioned in Section 1 deploy backwards time to illustrate the

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absurdity of some idea or point of view. In *Slaughterhouse-Five*, for instance, it is used to show the absurdity of war in the context of reversible (Einsteinian) physics: if time is reversible, why insist on a moral distinction between sending men to war and sending children? Kurt Vonnegut makes the filtration of time through the consciousness of a putative narrator-observer explicit. The protagonist, Billy Pilgrim, has "come unstuck in time" (Vonnegut 1991 [1969]: 16), with the result that he experiences flashbacks and flash-forwards, as well as temporal reversals. An example of the latter is a famous scene (5) in which Billy sees a movie backwards. The subjectivity of backwards time is signaled by the nesting of temporality within the movie as seen by the character: "Seen backwards by Billy, the story went like this:" (Vonnegut 1991 [1969]: 53)

(5) The bombers opened their bomb bay doors, exerted a miraculous magnetism which shrunk the fires, gathered them into cylindrical steel containers, and lifted the containers into the bellies of the planes. (Vonnegut 1991 [1969]: 53)

Here, a new viewpoint is established by framing the discourse with the logic *seen backwards* = *went like this*. The targeted negation here feeds into the deictic frame established by *like this*, which invites the reader to construct a semantically linked alternative in which it went 'like that'. Unusually, 'that' is the reality to which the reader's experience corresponds, so that the relationship between causality of the discourse and that of the reader's personal experience is again dissonant and the frame 'backwards' is anaphorically extended to the subsequent catachrestic discourse. Again, this framing is not a necessary condition for working out what is 'really' happening. Taken on its own, (5) is recognisable as a scene in which time goes backwards simply because we naturally reject the catachrestic usage within the default viewpoint flow of narrative, which we expect to correspond with our own phenomenological experience of time. This is evidence that the viewpoint flow which in narrative stands metonymically for time does not require explicit semantic framing. Instead, it proceeds on-the-fly, taking discourse statements as fragments of causality to be constructed from the bottom up, and as cumulatively signalling a direction for the construal of temporal flow. When it is realized that the viewpoint differs from our own with respect to time, an alternative space is constructed in which a second viewpoint flow is postulated. Both are maintained during narrative uptake.

Further evidence that this is the case is found in (6), a fragment from Philip K. Dick's *Counter-Clock World*.

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(6) 'There's someone I want you to meet, a virtually unknown inventor who's desperately eager to get official eradication for his thesis on, ahem, the psychogenic origins of death by meteor strike [...]'
'Tell him to eradicate his thesis himself. At his own expense.'
'There's no prestige in that.'
(Dick 2008 [1968]: 23)

This time the frame is absent, but the premise is detectable on the basis of causal catachresis: death by meteor strike is not caused by the mind; theses are typically produced and then published (or not), either by some institution or at the author's expense. Here, the characters seem to have free will (cf. Section 2), masking the determinism which was evident in the fragments considered in Section 4 and which drives the backward motion of plot against history.

As outlined in Section 2, there are two principal mappings of time in English. I argued that only one of these is logically compatible with backwards time without losing some of what makes time what it is and jeopardising the stability of the dual viewpoint configuration.[8] Of the texts mentioned in this study, all but one appeal to the Moving Time mapping. *Time's Arrow* and *Slaughterhouse-Five* appeal to Moving Time explicitly. These texts invite their reader to imagine events as if they were being played on a film shown in reverse which, as we saw, indicates a passive sagittal viewpoint flow.[9] Only (6) goes against this trend. This inconsistency is the result of the author's artistic decision to maintain a plot in which characters have agency, as opposed to being mere spectators of events which have already passed.[10] In other words, the inconsistency comes from the attempt to hide the future anteriority of the narrative form. Nevertheless, backwards time is produced by causal catachresis based on a viewpoint flow whose forward progress heads towards the past in terms of story events.

Time's Arrow differs from the other uses of backwards time mentioned here in at least two ways. First, it is the only example of backwards time being sustained across a novel consistently – *pace* Chatman (2009) – according to an identifiable logical principle. The narrative alters the default epistemic relationship between narrator and addressee, who as per convention

8 Free will, the second law of thermodynamics, etc.

9 In *Time's Arrow*, it is established early on that this is the conceit behind the organization of the narrative viewpoint: 'The mad are said to keep a film or stage set in their heads, which they order and art-decorate and move through. But Tod is sane, apparently, and his world is shared. It just seems to me that the film is running backwards.' (Amis 2003 [1991]: 16).

10 This is why the sequence of discourse statements is not inverted.

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share general knowledge and the viewpoint flow of the narrative, but whose interpretations of the significance of story events are semantically differentiated by causal catachresis. To reiterate: the narrator gives an account; the reader reconstrues it in order to make sense of events in forwards time; the reader is able to zoom out to a higher-level viewpoint and compare the two (Figure 1), revealing the black humor in the utterances analyzed in Section 4 such as *the crisis centre is not called a crisis centre for nothing* and *dying to be alive*. The dual viewpoint configuration of backwards time, then, strongly invites ironic interpretation.

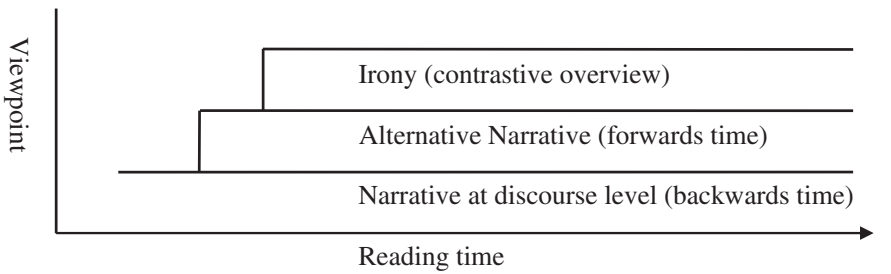

Figure 1: Construction of viewpoint hierarchy over time.

In narratives deploying backwards time, irony is latent. It is impossible to imagine backwards time without some reference to forwards time (although interestingly the reverse is not the case), so that one is encouraged to hold both in mind for comparison in a higher-level viewpoint construction (Figure 1). Recent research describes how narrative uses mental spaces to set up hierarchies of meaning content through what has been called a conceptual "zooming out", in which a higher viewpoint is postulated from which subordinate viewpoints can be structured (Dancygier 2012b), and how this can generate irony (Tobin and Israel 2012). The catachrestic rendering of temporally relative deictic terms denotes a dual-observer construal, probably rooted in the dualist picture of mind narrative implies by allowing a disembodied narrator-observer. This is an underlying feature of all narrative deixis which has yet to be explored in detail, possibly because it is only obvious in cases where an alternative viewpoint is forced into sight. In Section 6, I will break down causal catachresis by focusing on specific linguistic features in order to demonstrate that the confusion of earlier commentators analyzing *Time's Arrow* can be avoided under the rubric of narrative deixis combined with the concept of viewpoint.

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6 The rules

The following is a closely-worked example showing the interpretive logic at play:

(7) We eased in under the city: Grand Central, where the train sighed, and the passengers sighed, one by one. The first people to leave went off hastily, while others lingered, girding themselves for the streets. (Amis 2003 [1991]: 75)

Up to a point, standard literary interpretation based on "the strength of the evidence" (Chatman 2009: 44) is effective. The problem Chatman encounters with (7) is confusion as to whether passengers are entering or exiting and whether they are sighing or cheering. This leads him to the conclusion that "Amis's backward/antonymic reporting is selective" (Chatman 2009: 46). Upon what principle this selectivity proceeds, Chatman does not venture an opinion. We need not be so evasive. This problem can be solved with cognitive linguistics. The issue here is what events "look like" from particular viewpoints. The backwards viewpoint only inverts linguistic features governed by the temporal experience of the narrator-observer. The solution is to stick resolutely to an ego viewpoint and to invert only those features of narrative deixis which fall under a tripartite schema outlined by McTaggart (1908). McTaggart describes three series which may be used to define temporality: the A series, consisting of past, present and future; the B series, consisting of earlier-/later than relations; the C series, consisting of sequence (McTaggart 1908).[11] We can narrow this down by saying that only the B series and the orientation of the C series need to change since the A series is retrospectively attributed according to viewpoint (in order for the dual viewpoint to be maintained the A series must conform with the default construal). This puts us in a position to rule out nonsensical antonymic interpretations like "we eased out *over* the city" (the tracks at Grand Central Station are underground whichever way you look at it) and unnecessary recharacterizations of motion such as "we *labored* out under the city".

If I am correct, then while Chatman is right in saying that Amis's antonymy is selective, it is so because the technique is viewpointed catachresis rather than straightforward antonymy. This is selectivity with a purpose, not absent-mindedness on the part of the author. Here is my rendering of Example (1) as

11 This paper makes no claims about the metaphysical implications of McTaggart's argument. His terminology is employed simply as a useful tool with which to dissect the discourse.

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postulated in the alternative space – the "normal" temporal viewpoint of the character Tod Friendly. I have numbered each of my changes (italics):

(8) (I) We eased *out* under the city: Grand Central, (II) where the train [*had*] sighed, and the passengers [*had*] sighed, one by one. (III) The *last* people (IV) to *arrive* (V) *got on* hastily, while others lingered, (VI) *making themselves comfortable for the journey*.

The rationale is as follows. (I) The train leaves New York City. This is a deictically relative statement. The ego viewpoint of the narrator is traveling from Boston to New York. Both narrator and character are traveling but the former is traveling *to* and the latter *from* Grand Central Station. I antonymize the adverbial of direction ("in") and leave the verb of movement since it is bi-directional. Adverbial direction denotes relative position in sequence. It therefore belongs to the C series of time.[12]

(II) The relative adverb "where" indicates the construction of a new narrative space containing the following action of both the train and the passengers. Since Grand Central is the deictic ground in this space I transcribe the sentence into the pluperfect tense to indicate the relative change in the A series from the ego viewpoint of the character. For him, the deictic ground is *after* the events at Grand Central (this is simply to make the difference explicit; the pluperfect is not actually necessary for an antonymic reading). Another problem is caused by the verb "sighed". Chatman (2009) is confused. Should we antonymize this: "are we supposed to read [the passengers'] 'sighing' as its opposite, say, 'sucking in their breaths' or 'cheering'?" Again, we can dismiss this kind of hard antonymic/ironic reading under the rubric of alternative viewpoint. The train makes some kind of aspirate noise (we do not really care what that is – maybe pneumatic doors which would make such a noise whether opening or closing so it is immaterial in terms of time direction) and so do the passengers.

(III) "First" is an ordinal. It indicates sequence in the C series (i.e., it has implications for the relative meanings of *from* and *to*). It also provides reference for the calibration of the B series. I antonymize it because from the character's point of view these are the *last* people to get on the train.

(IV) Following from the previous clauses, the direction of "leave" must be antonymized: if the train is leaving, the people are arriving at the station in order to board the train.

(V) The directional verb phrase "went off" becomes "got on" in keeping with the sense of arrival. "Hastily" is a bi-directional adverb and may be left as it is.

12 E.g., A is to C as D is to F.

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The conjunction "while" indicates co-temporality but is unaffected by subjective experience. Similarly, "lingered" is a durative verb and in the absence of a clear beginning or end to this activity antonymization is unnecessary – it makes perfect sense for other passengers to linger (wait) while the last passengers to arrive get on hastily so as not to miss the train.

(VI) This is arguably the most difficult of the antonymic interpretations to justify. In this case, a whole hypothetical scenario based on the narrator's theory of mind (i.e., construal of motive and personal causality) must be constructed in reverse. "Girding themselves for the streets" is an attribution of intention based on an interpretation of implicit activity (we do not know what this "girding" consists of) relative to an anticipated activity. I therefore opt for a translation of "girding themselves for the streets" in its entirety, conceiving it in the alternative space as the activities corresponding to making oneself comfortable on a train (taking a coat off, stowing a bag, etc.).

If this analysis seems somewhat painstaking and artificial, that is because it is. Backwards narrative relies on a reader's intuitive grasp of the effect at work. It is unlikely that the reader will consciously translate all of the terms directly in the manner that I have here, but will instead construct an alternative space based on the gist of the discourse. This discussion is designed to show that using cognitive linguistics we can uncover both how this gist is formed and the principle of composition upon which backwards narrative is predicated while avoiding the interpretive pitfalls of a more generalized literary approach.

7 Conclusions

Narrative's tendency to align temporality with a putative narrator-observer plays an important role in determining viewpoint for deixis. In backwards time, this viewpointing in turn prompts the construction of an alternative space by bending the rules of the default temporal construal. The method in *Time's Arrow* is explicitly conceived as a doubly-populated deictic ground, making use of the fact that a narrator does not have to be the same consciousness as a character even when they share identity (a quick glance at a typical autobiography is evidence enough of this). But in fact, any narrator of backwards time, embodied or not, incurs a Janus-like gaze in which the default temporal viewpoint configuration is mirrored so that two viewpoints are maintained on a sequence of events. The understanding is that in the alternative viewpoint the story 'went' differently.

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Two levels of negation are used to produce the alternative viewpoint: first, the sequence of story events (i.e., plot) is inverted; second, deictically relative linguistic elements undergo catachresis. As a result, two viewpoint flows are run against one another. The temporal construal appealed to by the narrator is passive and sagittal: the time that goes by already went by in a different direction. The construction invited by the narrative as a textual object, on the other hand, is active and sagittal. This contributes to the sense that experience continues forwards even as causality proceeds backwards, allowing the irony (e.g., healing as harming) to obtain. It is the catachrestic semantics of this viewpoint which forces the construction of an alternative space in which the inverse – what ought to be the case – occurs. Sentential linguistic elements thus reconfigure narrative spaces from the bottom up in line with alternative temporality. At the same time, episodic reversal ensures that linguistic choices which do seem natural are reframed from the top down (e.g., *dying to be alive*), generating irony. Where all of this leaves us, if I am correct, is with a rule for construing backwards time through both top-down reorganization of episodes and bottom-up recognition of catachresis. I have called it an alternative viewpoint because the postulated subjective time of a narrator is the organizing principle by which events are construed.

This paper finds, with (Evans 2013), that commonplace linguistic mappings of time follow intuitively from the phenomenological experience of subjects and their neurological representation of time passing. It also reinforces Nuñez and Sweetser's argument (2006) that whether it is Time or the Ego that moves in the cognitive mapping of time employed, discourse construes events relative to Ego. The analysis presented here adds nuance to these findings, however, since it becomes clear that in narrative there is another side to both mappings. The experience-led conceptualization of time allows for linguistic manipulation of temporality by preserving forward progress in the face of linguistic features which indicate alternative event sequences and causalities.

The phenomenological experience of time encoded in grammar, particularly deixis, drives teleological linguistic constructions such as narrative in a unidirectional fashion. This results in a top-down restructuring of episodes into a coherent received chronology. However, narratives of backwards time reconfigure this order. By introducing unexpected catachrestic use of deictic terms relative to time, backwards narrative destabilizes the default relationship between narrative progress and event sequence. The reader is coopted into adopting a backward viewpoint masquerading as a forward viewpoint. As a consequence, the coordination of the reader's 'forwards' viewpoint with the conventional forward drive of the narrative and with English grammar sets deictically determined semantic elements against the received viewpoint flow, inviting the construction of an alternative narrative.

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The evidence presented here is only a small sample of the literature on backwards time. Although that literature is itself limited, possibly owing to the mental cost of processing such discourse, its existence tells us three things. First, it tells us that there is reason to believe that narrative temporality does not straightforwardly borrow the phenomenological time of the reader. Instead, the phenomenological time of the reader feeds into the teleological drive of the narrative which in turn codifies temporal progress according to specific temporal metaphors and cognitive mappings, neither of which need cohere with the reader's own. Second, it shows us that narrative is capable of running multiple temporalities in a proliferating configuration of mental spaces which allow additional meanings to be drawn out of individual discourse statements. Third, even without explicit semantic framing, causal catachresis modifies the dual viewpoint configuration suggested by commonplace past tense narration, adding a mirror image of those temporal viewpoints. This suggests that there may be other elements of deixis from which alternative spaces might be triggered by targeted catachresis. Finally, backwards narratives tell us that although by default a narrator's experience of time agrees with our own, this agreement is quite arbitrary. An alternative is always cognitively accessible, though perhaps not linguistically present.

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